

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-19 are now pending in this application. Claim 17 has been amended. Reconsideration of this application, as amended, is respectfully requested.

Drawings Objections

Applicant thanks the Examiner for the approval of the corrected formal drawings.

Allowable Subject Matter

The Examiner has indicated that claims 13-16 are allowed. The Examiner has indicated that claims 2-9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the Examiner for the indication of allowable subject matter.

Rejection under 35 U.S.C. § 102-Harman

Claims 1 and 10-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Harman. This rejection is respectfully traversed.

Applicant's independent method claim 1 recites a combination of steps in a method "of calibrating a system for detecting a location of a potential breach along a security fence." The claimed method steps include:

taking note of a ground distance between a reference point and the certain position;

...
determining an associated cable length existing between the light transmission and reception device and the interruption in the fiber optic cable; and

recording the ground distance and the associated cable length in a memory.

As the Examiner is well aware, for a reference to anticipate a claim, the reference must show all of the recited method steps. It is respectfully asserted that Harman fails to show or suggest the claimed method steps.

One point of contention appears to be the Examiner's assertion that Harmon teaches "taking note of a ground distance between a reference point and the certain position," as recited in Applicant's claim 1. The Examiner alleges that this feature is anticipated in Harmon's col. 14, lines 6-17. Applicant respectfully disagrees. Col. 14, lines 6-17 are reproduced below:

The threshold values T.sub.j..delta., j=1,2, ..., 20 and .delta.=1,2, ..., 16 are set during the sensor "calibration" procedure. A "calibrate" switch sets processor 30 into a calibration mode. A person walks along the entire 200 meter length of cable, striking the fence "fabric" with a "standard" force at least once every subcell length of 0.625 meters, preferably more often. The above described signal processing proceeds, except that during calibration the responses R.sub.jk are stored in the appropriate threshold locations T.sub.j..delta., j=1,2, ..., 20 and .delta.=1,2, ..., 16. After the complete length of cable 5 is calibrated, the "calibrate" switch is turned off.

Applicant can find no reference in this portion of Harmon's disclosure to the person taking note of the distance between a reference point and the point where the cable is struck. All that is said is that a person walks along the entire fence (approximately 200 meters long) and strikes the fence once or twice every step (approximately 0.625 meters). The person is not taking note of a distance between the strike point and a reference point. In fact, the person may strike the fence once within every 0.625 meters or twice or even three times. There is no showing or suggestion that the person takes some measurement back to the reference point each time the fence is struck.

Claim 1 also recites "recording the ground distance and the associated cable length in a memory." The Examiner alleges that this method step is also taught in the same passage of Harmon (col. 14, lines 6-17). Again, Applicant must respectfully disagree.

The only thing being recorded in Harmon are the amplitude of the responses to the cable being struck. Harmon makes no mention to record any ground distance. Indeed, it would not make sense to record ground distances in the Harmon system. Harmon has defined that each subcell equals 0.625 meters. There is no provision to record other distances into the system. All that is being done is to record the amplitude response of a strike in the pre-established subcells.

Harman shows a method of calibrating a fiber optic security fence. However, Harman is calibrating the responsiveness of the system in various zones along the fence to an intrusion. There is no calibration process in Harmon to determine a ground distance to the intrusion.

Harmon teaches that the intensity of a reflected pulse at an intrusion point will be different depending upon the general area along the fence (which Harmon refers to as a range cell) at which the intrusion occurs. Harmon's "calibration process accounts for variations in the sensitivity of transducer cable 5 due to cable imperfections, condition of the fence fabric, location of the fence posts, etc." (Col. 14, lines 18-21). The purpose of Harmon's calibration is to reduce the number of false alarms, through "the use of multiple individual thresholds," for each range cell. See Col. 15, lines 3-32.

Harman determines the distance to the intrusion point using a simple mathematical formula, as revealed in col. 9, lines 44-53. Therefore, Harman uses a location approximation approach, as described in Applicant's "Background of the Invention" section of the specification, in paragraphs 12-14.

Harman fails to show or suggest a calibration method regarding the location of the breach. Moreover, Harman fails to show or suggest any method step where note is taken of a ground distance between a reference point and a certain position where a person interrupts light traveling in a security fence, wherein the ground distance is recorded. In Harman, a person simply strikes the

fence with a uniform "standard" force (col. 14, line 11). The person does not make note of a ground distance when making the strike. Harmon places no importance on the distance where the strike is made relative to a reference point. Indeed, Harmon suggests that the person may strike the fence once, twice, or more times during a subcell interval, showing a lack of regard to the exact ground distance where any strike occurs. Moreover, there is no recording of the ground distance along with the associated cable length in a memory. In Harman, there is recording of the intensity of the pulse along with the associated cable length in a memory, in order to establish a relevant threshold level.

Claims 10-12 depend from claim 1, and should be considered allowable for at least the same reasons, as advanced above.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection under 35 U.S.C. § 103 - Maki in view of Alizi

Claims 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Maki (U.S. Publication No. 2005/0024210) in view of Alizi (5,434,557). This rejection is respectfully traversed for several reasons.

The Examiner alleges that paragraph 0012 reveals monitoring a light transmission and reception device. In fact, paragraph 0012 does not deal with

light transmission. Rather, an electrical pulse is transmitted over a shielded coaxial cable and monitored for a capacitance or impedance change.

The Examiner alleges that paragraph 0037 reveals a lookup table. In fact, paragraph 0037 makes no mention of a lookup table.

Also, the Examiner alleges that Figure 1 of Alizi teaches "determining an average weave pattern density of the fiber optic cable for the zone." It is not understood how a figure could teach determining an average weave pattern density. At best, Figure 1 of Alizi appears to illustrate a fence having a constant weave pattern density. Claim 17 has been amended to recite that the weave pattern density differs from zone to zone. Accommodating this difference is a primary feature of the locating system of the present invention. Certainly, neither Maki, nor Alizi, show or suggest such a feature in the combination as claimed.

Independent claim 17 should be considered allowable for at least one of the reasons advanced above. Claims 18 and 19 depend from claim 17 and should be considered allowable for at least the same reason(s).

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mr. Scott L. Lowe (Reg. No. 41,458) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By 

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